UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,902	03/26/2001	Tedd Dideriksen	MS1-786US	9520

22801 7590 02/24/2004

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER	
LE, MIRANDA	
ART UNIT	PAPER NUMBER
2177	13

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/817,902	DIDERIKSEN ET AL.	
	Examiner	Art Unit	
	Miranda Le	2177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 12/03/2003.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1- 38 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-38 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to Amendment A, filed 12/03/2003.

2. Claims 1-38 are pending in this application. Claims 1, 9, 13, 21, 23, 29, 31, 34, 35, 38 are independent claims. In the Amendment A, claims 20, 29, 34, 35, 38 have been amended. This action is made Final.

3. The objection to the specification (claim objection) of the invention has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless:
>
> (e) the invention was described in
>
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or
>
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Zoest et al. (US Patent No. 6,496,802 B1).

Van Zoest anticipated independent claim 21, by the following:

As per claim 21, Van Zoest teaches "a timestamp module for assigning timestamps to audio samples that are to be rendered by a media player renderer" at col. 4, lines 57-65;

"a spectrum analyzer for processing the audio samples to provide frequency data associated with the audio samples" at col. 16, lines 9-43;

"multiple data structures each of which being associated with an audio sample, the data structures each containing timestamp data and frequency data for its associated audio sample" at col. 5, lines 8-19, col. 6, lines 18-25, col. 9, lines 24-65, col. 4, lines 57-65, col. 16, lines 9-14, Fig. 2;

"the system being configured to use the timestamp data to ascertain a data structure associated with an audio sample that is currently being rendered by the media player renderer and provide the frequency data associated with that audio sample so that the frequency data can be used to render a visualization associated with that audio sample" at col. 5, lines 8-19, col. 16, lines 9-15, col. 18, lines 55-61.

As per claim 22, Van Zoest teaches "the spectrum analyzer comprises a Fast Fourier Transform that is utilized to provide the frequency data" at col. 16, lines 9-14.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al. (US Patent No. 6,269,122 B1), in view of Milne et al. (US Patent No. 5,655,144).

Prasad anticipated independent claims 35, 38, by the following:

As per claim 35, Prasad teaches "defining a frame rate at which visualization frames are to be rendered" at col. 6, lines 1-60;

"setting a threshold associated with an amount of time that is to be spent rendering a visualization frame" at col. 6, lines 1-60;

"monitoring the time associated with rendering individual visualization frames" at col. 6, lines 1-60, col. 7, lines 29-59;

"determining whether a visualization frame rendering time exceeds the threshold" at col. 6, lines 1-60, col. 7, lines 1-28;

"and providing an effective frame rate for rendering visualization frames that is longer than the defined frame rate if the determined visualization frame rendering time exceeds the threshold" at col. 6, lines 1-60, col. 7, lines 29-59.

Prasad does not explicitly teach "the visualization frames rendered from characterizing data that is computed from audio sample and which is used to create the visualization". However, Milne teaches this limitation at col. 17, lines 15-39.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Prasad with the teachings of Milne to include "the

visualization frames rendered from characterizing data that is computed from audio sample and which is used to create the visualization" in order to display the visual clock object being synchronized with the audio clock object as taught by Milne at col.19, lines 8-11.

As per claim 38, Prasad teaches "set a threshold associated with an amount of time that is to be spent rendering a visualization frame for a given frame rate" at col. 6, lines 1-60;

"monitor the time associated with rendering individual visualization frames (step of determining the total elapsed time)" at col. 6, lines 1-60, col. 7, lines 1-28;

"determine whether a visualization frame rendering time exceeds the threshold" at col. 6, lines 1-60, col. 7, lines 1-28;

"provide an effective frame rate (step of adjusting the rate of playback of the recorded video stream 41) for rendering the visualization that is longer than the defined frame rate if the determined visualization frame rendering time exceeds the threshold" at col. 5, line 48 to col. 6, line 60.

Prasad does not specifically teach "said visualization frame being associated with a visualization that is rendered using characterizing data that is computed from audio samples, which characterizing data is used to create the visualization". However, Milne teaches this limitation at col. 17, lines 15-39.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Prasad with the teachings of Milne to include "said visualization frame being associated with a visualization that is rendered using characterizing data that is computed from audio samples, which characterizing data is used to create the visualization" in

order to display the visual clock object being synchronized with the audio clock object, as taught by Milne at col.19, lines 8-11.

As per claim 36, Prasad teaches "increasing a call interval associated with calls that are made to a visualization-rendering component" at col. 5, lines 48-67.

As per claim 37, Prasad teaches "modifying the effective frame rate so that the visualization frames are rendered at the defined frame rate" at col. 6, line 61 to col. 7, lines 59.

8. Claims 1-6, 9-11, 13, 16, 17, 23-26, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milne et al. (US Patent No. 5,655,144), in view of Jang et al. (US Patent No. 6,442,758 B1).

As per claim 1, Milne teaches "one or more audio sources configured to provide audio samples that are to be rendered by a media player" at col. 16, lines 13-19, col. 15, lines 48-60;

"one or more effects configured to receive the characterizing data (clock rate) and use the characterizing data to render a visualization that is synchronized with an audio sample that is being rendered by the media player" at col. 16, lines 63-64, col. 19, lines 1-11, col. 15, lines 39-59, col. 18, lines 1-12, and Figs 11, 37.

Milne teaches "an audio sample pre-processor communicatively linked with the one or more audio sources and configured to receive and pre-process audio samples before the samples are rendered, the pre-processing providing characterizing data associated with each sample" at

col. 19, lines 1-11, col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. However, Milne does not expressly teach a pre-processor.

Jang teaches the pre-processor 117 at col. 11, lines 1-2, Figure 6.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include "an audio sample pre-processor communicatively linked with the one or more audio sources and configured to receive and pre-process audio samples before the samples are rendered, the pre-processing providing characterizing data associated with each sample" in order to split the audio signal into stereo signals.

As per claim 9, Milne teaches "one or more effects configured to receive the frequency data and use the frequency data to render a visualization that is synchronized with an audio sample that is being rendered by the media player" at col. 16, lines 63-64, col. 19, lines 1-11, col. 15, lines 39-59, col. 18, lines 1-12, and Figs 11, 37.

Milne teaches "an audio sample pre-processor configured to receive and pre-process audio samples before the samples are rendered by the media player, the pre-processing providing frequency data associated with each sample" at col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. Milne, however, does not specifically teach a pre-processor.

Jang teaches the pre-processor 117 at col. 11, lines 1-2, Figure 6.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include "an audio sample pre-processor configured to receive and pre-process audio samples before the samples are

rendered by the media player, the pre-processing providing frequency data associated with each sample" in order to achieve greater bandwidth.

As per claim 13, Milne teaches "multiple data structures configured to hold the characterizing data, each to data structure being associated with an audio sample" at col. 17, lines 13-58, col. 4, lines 4-17;

"an audio rendering object configured to call the audio sample pre-processor to ascertain the characterizing data associated with an audio sample that is currently being rendered by the renderer" at col. 16, lines 21-39, col. 6, lines 21-33, col. 8, lines 32-39;

"one or more effects configured to receive characterizing data that is associated with the data structure (graphic objects related by time) having the timestamp that is nearest in value to said time, and use the characterizing data to render a visualization that is synchronized with the audio sample that is being rendered by the renderer" at col. 16, lines 22-39, col. 19, lines 1-11, col. 17, lines 15-63, Fig. 12, Fig. 36.

"the audio sample pre-processor being configured to ascertain said characterizing data by querying the renderer for a time associated with the currently-rendered audio sample, and then using said time to identify a data structure having a timestamp that is nearest in value to said time" at col. 16, lines 22-39, col. 19, lines 1-11, col. 17, lines 15-63, col. 9, lines 43-61, col. 8, lines 40-65;

"an audio sample pre-processor configured to receive and preprocess audio samples before the samples are rendered by a renderer that comprises part of a media player (col. 16, lines 62-64, col. 15, lines 39-59, Fig. 25), the audio sample preprocessor preprocessing the

samples to provide characterizing data associated with each sample, the characterizing data comprising a timestamp associated with each audio sample, the timestamp being assigned in accordance with when the audio sample is calculated to be rendered by the renderer" at col. 19, lines 1-12, col. 16, lines 13-39, col. 15, lines 48-60, col. 16, line 40 to col. 17, line 12.

However, Milne does not specifically teach a pre-processor.

Jang teaches the pre-processor 117 at col. 11, lines 1-2, Figure 6.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include "a pre-processor" in order to split the audio signal into stereo signals being sent to a respective audio bus within the audio bus system.

As per claim 23, Milne teaches "receiving multiple audio samples" at col. 16, lines 13-39, col. 15, lines 48-60;

"determining when an audio sample is being rendered by the media player renderer" at col. 19, lines 1-11, col. 17, lines 15-63, col. 16, lines 21-39;

"responsive to said determining, using the characterizing data that is associated with the audio sample that is being rendered to provide a visualization" at col. 16, lines 21-39, col. 19, lines 1-11, col. 17, lines 13-58;

"pre-processing the audio samples before they are rendered by a media player renderer, the pre-processing providing characterizing data for each sample" at col. 16, lines 13-39, col. 15, lines 48-60.

However, Milne does not explicitly teach a pre-processor.

Jang teaches the pre-processor 117 at col. 11, lines 1-2, Figure 6.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include "pre-processing the audio samples before they are rendered by a media player renderer, the pre-processing providing characterizing data for each sample" in order to split the audio signal into stereo signals being sent to a respective audio bus within the audio bus system.

As per claim 31, Milne teaches "calling the media player renderer for a time associated with a currently rendered audio sample" at col. 16, lines 21-39, col. 19, lines 1-11;

"using the time to select a data structure containing characterizing data associated with the currently-rendered audio sample" at col. 17, lines 13-58, col. 19, lines 1-12, Fig. 37;

"providing the characterizing data to a component for rendering a visualization" at col. 19, lines 1-19, Fig. 37, col. 17, lines 1-12, col. 17, lines 15-63.

"calling an audio sample pre-processor for characterizing data that is associated with an audio sample that is currently being rendered by a media player renderer" at col. 16, lines 13-39, col. 15, lines 48-60.

However, Milne does not expressly teach a pre-processor.

Jang teaches the pre-processor 117 at col. 11, lines 1-2, Figure 6.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include "calling an audio sample pre-processor for characterizing data that is associated with an audio sample that is

currently being rendered by a media player renderer" in order to split the audio signal into stereo signals being sent to a respective audio bus within the audio bus system.

As per claim 2, Milne teaches "multiple data structures configured to hold the characterizing data, each data structure being associated with an audio sample" at col. 4, lines 4-17.

As per claim 3, Milne teaches "the audio sample pre-processor is configured to maintain the data structures" at col. 8, line 57 to col. 9, line 13.

As per claim 4, Milne teaches "the audio sample pre-processor comprises a timestamp module that provides a timestamp for each audio sample, each timestamp being maintained by a data structure associated with the audio sample" at col. 16, line 13 to col. 17, line 12.

As per claim 5, Milne teaches "the timestamp is assigned by the timestamp module based upon when the audio sample is calculated to be rendered by the media player" at col. 16, line 13 to col. 17, line 12.

As per claim 6, Milne teaches "the audio sample pre-processor is configured to: query a media player audio sample renderer for a time associated with an audio sample that is being currently rendered" at col. 15, line 48 to col. 16, line 39,

"and use the time to ascertain a timestamp of an associated audio sample, the to audio sample pre-processor further being configured to provide characterizing data of the associated

audio sample so that the characterizing data can be used to render the visualization" at col. 17, lines 14-63, col. 19, lines 1-12, Fig. 36.

As per claim 10, Milne teaches "multiple data structures configured to hold the frequency data, each data structure being associated with an audio sample" at col. 4, lines 4-17.

As per claim 11, Milne teaches "query a media player audio sample renderer for a time associated with an audio sample that is being currently rendered" at col. 15, line 48 to col. 16, line 39,

"and use the time to ascertain a timestamp of an associated audio sample, the audio sample pre-processor further being configured to provide frequency data of the associated audio sample to the one or more effects so that the frequency data is can be used to render the visualization" at col. 17, lines 14-63, col. 19, lines 1-12, Fig. 36.

As per claim 16, Milne teaches "the visualization is rendered in a rendering area in which other media types can be rendered" at col. 17, lines 15-63, Figs. 12, 36.

As per claim 17, Milne teaches "the other media types comprise a video type" at col. 17, lines 15-63, Figs. 12, 36.

As per claim 24, Milne teaches "maintaining characterizing data for each audio sample in a data structure associated with each audio sample" at col. 4, lines 4-17.

As per claim 25, Milne teaches "the characterizing data comprises a timestamp associated with the audio sample, the timestamp being provided based upon when the audio sample is calculated to be rendered by the media player renderer" at col. 16, line 40 to col. 17, line 12.

As per claim 26, Milne teaches "ascertaining a time associated with a currently-rendered audio sample" at col. 19, lines 1-12;

"selecting a data structure having a timestamp that is nearest the time" at col. 19, lines 1-12;

"providing characterizing data associated with the selected data structure to a component configured to provide the visualization" at col. 17, lines 1-12, col. 17, lines 15-63.

9. Claims 7-8, 12, 14-15, 27-29, 30, 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milne et al. (US Patent No. 5,655,144) and Jang et al. (US Patent No. 6,442,758 B1), and further in view of Van Zoest et al. (US Patent No. 6,496,802 B1).

As per claim 29, Milne teaches "receiving multiple audio samples" at col. 15, line 61 to col. 16, line 20;

"maintaining frequency data and a timestamp for each sample in a data structure" at col. 16, lines 21-59;

"determining when an audio sample is being rendered by the media player renderer" at col. 16, lines 21-39;

"ascertaining a time associated with a currently-rendered sample at col. 16 lines 21-39;

"selecting a data structure (graphic objects related by time) having a timestamp that is nearest the time" at col. 17, lines 13-58;

"providing frequency data (clock rate) associated with the selected data structure (A graphic sequence provides a member function that maps a time within the duration of the sequence to a particular graphic object) to a component configured to use the frequency data to render the visualization" at col. 17, lines 15-27, col.19, lines 1-11, col. 16, lines 40-59, Fig. 37.

Milne does not specifically teach a pre-processor and a Fast Fourier Transform.

Jang teaches the audio pre-processor 117 in Figure 6.

It thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include a "pre-processor" in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

Furthermore, Van Zoest teaches the Fast Fourier Transform at col. 16, lines 9-15.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "a Fast Fourier Transform" in order to provide a multimedia system having a frequency analysis of data as taught by Van Zoest at col. 16 line 17. By doing this, the system could verify and identifying the corresponding portions of the samples with maximum correlation, as taught by Van Zoest at col. 16, lines 4-6.

As per claim 34, Milne teaches "query for frequency data that is associated with an audio sample that is currently being rendered by the media player renderer" at col. 16, lines 16-59.

"query for a time associated with the currently-rendered audio sample" at col. 16, lines 16-59;

"use the time to select a data structure containing frequency data associated with the currently-rendered audio sample" at col. 17, lines 15-27, col. 19, lines 1-11, col. 16, lines 40-59 and Fig. 37.

"provide the frequency data to a component for rendering a visualization" at col. 17, lines 15-27, col. 19, lines 1-11, col. 16, lines 40-59 and Fig. 37.

Milne teaches the pre-processing audio sample, which is performed by a host processor as shown in Fig. 25. But Milne does not specifically disclose the term "pre-processor".

Milne does not specifically teach a pre-processor and a Fast Fourier Transform.

Jang teaches the audio pre-processor 117 in Figure 6.

It thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne with the teachings of Jang to include a "pre-processor", in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

In addition, Van Zoest teaches the Fast Fourier Transform at col. 16, lines 9-15.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "a Fast Fourier Transform" in order to provide a multimedia system having a

frequency analysis of data as taught by Zoest at col. 16 line 17. By doing this, the system could verify and identifying the corresponding portions of the samples with maximum correlation, as taught by Van Zoest at col. 16, lines 4-6.

As per claims 7, 14, Milne and Jang do not expressly teach "characterizing data comprises frequency data". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "characterizing data comprises frequency data" in order to provide a system and method for providing access to electronic works to users over a network.

As per claim 8, Milne and Jang do not explicitly teach "a Fast Fourier Transform that it utilizes to process the audio samples to provide frequency data associated with the audio samples". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "a Fast Fourier Transform that it utilizes to process the audio samples to provide frequency data associated with the audio samples" in order to provide a system and method for providing access to electronic works to users over a network.

As per claim 12, Milne and Jang do not specifically teach "the audio sample pre-processor pre processes the audio samples by using a Fast Fourier Transform to provide the frequency data". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "the audio sample pre-processor pre processes the audio samples by using a Fast Fourier Transform to provide the frequency data" in order to provide a system and method for providing access to electronic works to users over a network.

As per claims 15, 28, Milne and Jang do not explicitly teach "the audio sample pre-processor comprises a Fast Fourier Transform that it utilizes to process the audio samples to provide frequency data associated with the audio samples". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "the audio sample pre-processor comprises a Fast Fourier Transform that it utilizes to process the audio samples to provide frequency data associated with the audio samples" in order to provide a system and method for providing access to electronic works to users over a network.

As per claims 27, 32, Milne and Jang do not specifically teach "the characterizing data comprises frequency data associated with each sample". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "the characterizing data comprises frequency data associated with each sample" in order to provide a system and method for providing access to electronic works to users over a network.

As per claim 30, Milne teaches "One or more computer-readable media having computer-readable to instructions thereon which, when executed by a computer, cause the computer to implement the method of claim 29" at col. 3, line 51 to col. 4, line 46.

As per claim 33, Milne and Jang do not specifically teach "the characterizing data comprises frequency data associated with the audio samples and generated by pre-processing the audio samples using a Fast Fourier Transform". However, Van Zoest teaches this limitation at col. 16, lines 9-14.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Van Zoest to include "the characterizing data comprises frequency data associated with the audio samples and generated by pre-processing the audio samples using a Fast Fourier Transform" in order to provide a system and method for providing access to electronic works to users over a network.

12. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milne et al. (US Patent No. 5,655,144) and Jang et al. (US Patent No. 6,442,758 B1), and further in view of Chernock et al. (US Patent No. 6,314,569 B1).

As per claim 18, Milne and Jang do not specifically teach "the other media types comprise a skin type". However, Chernock teaches this limitation at col. 6, lines 36-44.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Chernock to include "the other media types comprise a skin type" in order to provide a system which enables the display or playing of audio, video, or graphics objects in tandem with the video and audio play of a digital video presentation.

As per claim 19, Milne and Jang do not specifically teach "the other media types comprise a HTML type". However, Chernock teaches this limitation at col. 7, lines 1-8.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Chernock to include "the other media types comprise a HTML type" in order to provide a system which enables the display or playing of audio, video, or graphics objects in tandem with the video and audio play of a digital video presentation.

As per claim 20, Milne and Jang do not specifically teach "the other media types comprise an animation type". However, Chernock teaches this limitation at col. 2, lines 36-48.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Milne, Jang with the teachings of Chernock to include "the other media types comprise a animation type" in order to provide a system which enables the

display or playing of audio, video, or graphics objects in tandem with the video and audio play of a digital video presentation.

Response to Arguments

13. Applicant's arguments filed 12/03/2003 have been fully considered but they are not persuasive.

Applicant argues that:

(a) Milne and Jang references do not teach/suggest claim 1, the combination Milne and Jang appear to be based on hindsight reconstruction that has utilized Applicant's disclosure.

(b) Milne and Jang references do not teach/suggest claim 9.

(c) Milne and Jang references do not teach/suggest claim 13.

(d) Milne and Jang references do not teach/suggest claim 23.

(e) Milne and Jang references do not teach/suggest claim 31..

(f) Van Zoest reference does not teach/suggest claim 21.

(g) Van Zoest, Jang, Chernock references do not teach/suggest claim 29.

(h) Van Zoest reference does not teach/suggest claim 34.

(i) Prasad reference does not teach/suggest claim 35.

(j) Prasad reference does not teach/suggest claim 38.

The Examiner respectfully disagrees for the following reasons:

Per (a), with regards to claim 1, Milne teaches "one or more audio sources configured to provide audio samples that are to be rendered by a media player" at col. 16, lines 13-19, col. 15,

lines 48-60. More specifically, Milne discloses "the audio player can synchronize to an external clock. In this case, the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock. For example, if at a given instant in time of the external clock object's current time is two seconds, then the 88200th sample in the audio sequence should at that instant be reproduced by the speaker" (col.16, lines 22-29).

Milne teaches "one or more effects configured to receive the characterizing data and use the characterizing data to render a visualization that is synchronized with an audio sample that is being rendered by the media player" at col. 16, lines 63-64, col. 19, lines 1-11, col. 15, lines 39-59, col. 18, lines 1-12, and Figs 11, 37. It should be noted the data characteristic corresponds to the "clock rate", and as shown in Fig 11, both audio and video sequences receive the characterizing data (i.e. clock rate) for synchronizing, and the characterizing data (i.e. clock rate) provided by the software clocks (col. 6, lines 63) is controlled by a microprocessor (col. 3, line 58), and the synchronization between an audio object 3720 and a video object 3710 are shown in Fig. 37.

Milne teaches the step of "an audio sample pre-processor communicatively linked with the one or more audio sources and configured to receive and pre-process audio samples before the samples are rendered, the pre-processing providing characterizing data associated with each sample" at col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. More specifically, as shown in Fig. 25, the audio sample is provided characterizing data (i.e. clock rate) associated with each sample before the samples are rendered. It should be noted that the DAC and amplifier render the audio sample after the host processor (Fig. 25).

Although the function of the Milne's processor is as same as the function of the present invention's pre-processor which provides the frequency data (Specification, page 19, lines 4-5), Milne does not specifically use the term "pre-processor". However, Jang teaches the audio pre-processor 117 in Figure 6. Both Milne and Jang direct to the same field as the synchronization between the audio and video data based on the audio sample rate, it thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Milne with the teaching of Jang to include "a pre-processor" in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the reconstruction is proper for the reasons submitted in the preceding paragraph.

Furthermore, the Applicant's arguments seem to be suggesting that there is no suggestion to combine the references. In response to the arguments, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the same reasoning by the Examiner is applicable to this argument can be found in the previous paragraph. Furthermore, as pointed out by the Examiner, only the teaching of preprocessing being taught by Jang is used in combining with the system of Milne to render obvious the claimed limitations.

The Applicant has made a piecemeal analysis of the references. The Applicant is therefore reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Accordingly, the claimed invention as represented in the claims does not represent a patentable over the art of record.

Per (b), with regards to claim 9, Milne teaches "one or more effects configured to receive the frequency data and use the frequency data to render a visualization that is synchronized with an audio sample that is being rendered by the media player" at col. 16, lines 63-64, col. 19, lines 1-11, col. 15, lines 39-59, col. 18, lines 1-12, and Figs 11, 37. It should be noted the frequency data corresponds to the "clock rate", and as shown in Fig 11, both audio and video sequences receive the frequency data (i.e. clock rate) for synchronizing. Note that the characterizing data provided by the software clocks (col. 6, lines 63) is controlled by a microprocessor (col. 3, line 58).

Milne teaches the step of "an audio sample pre-processor configured to receive and pre-process audio samples before the samples are rendered by the media player, the pre-processing providing frequency data associated with each sample" at col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. More specifically, as shown in Fig. 25, the audio sample is provided frequency data (i.e. clock rate) associated with each sample before the samples are rendered. It should be noted that the amplifier (i.e. audio card) renders the audio sample after the host processor (Fig. 25).

Milne teaches a software clock is responsible for providing the time base, while multimedia player resides in RAM, and under the control of CPU (col. 6, the last line). It should be noted that the time base is a frequency data (a time object is a floating point number that measure a point in time, measured in Pico seconds) (col. 7, line 24-34). Although Milne does not specifically teach the term "pre-processor", Jang discloses a pre-processor 117 as in Fig 6.

Both Milne and Jang are directed to the same field as synchronizing video and audio data associated with the frequency data, it thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Milne with the teaching of Jang to include "a pre-processor", in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

Therefore, the claim language as presented is still read on by the Milne and Jang references at the cited paragraph in the claim rejections. Arguments as raised are moot since all claim limitations relevant to this issue have been addressed accordingly

Per (c), with regards to claim 13, Milne teaches the step of "an audio sample pre-processor configured to receive and preprocess audio samples before the samples are rendered by are rendered by a renderer that comprises part of a media player, " at col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. It is brought to Applicant's attention that as shown in Fig. 25, the audio sample is provided frequency data (i.e. clock rate) associated with each sample before the samples are rendered. Note that the renderer corresponds to the amplifier (i.e. audio card, which is a part of the media player) rendering the audio sample after the host processor (Fig. 25).

Milne teaches "the characterizing data comprising a time stamp associated with each audio sample, the time stamp being assigned in accordance with when the audio sample is calculated to be rendered by the renderer" at col. 19, lines 1-12. It is noted that the visual clock object 3720 is synchronized with the audio clock object 3720 as shown in Figure 37.

Milne teaches "the multiple data structures configured to hold the characterizing data, each data structure being associated with an audio sample" at col. 17, lines 13-58. The data structure corresponds to the "graphic objects related by time" (col. 17, lines 18).

Milne teaches "an audio rendering object configured to call the audio sample to ascertain the characterizing data associated with an audio sample that is currently being rendered by the renderer" at col. 16, lines 21-39, that is, "The audio player can synchronize to and external clock. In this case, the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock". It should be noted that the rendering object corresponds to an audio rendering object.

Milne teaches "the audio sample pre-processor being configured to ascertain said characterizing data by querying the renderer for a time associated with the current-rendered

audio-sample, and then using said time to identify a data structure having a time stamp that is nearest in value to said time" at col. 16, lines 21-39, col. 19, lines 1-11, col. 17, lines 13-58. Note that the characterizing data corresponds to the current time (col. 16, line 32) which is examined to determine if it needs to speed up or slow down the play back rate or jump to a new position in the audio sequence in order to insure that the correct sample are being played from the speaker (col. 16 lines 33-36), and the data structure corresponds to the "graphic objects related by time" (col. 17, lines 18).

Milne teaches "one or more effects configured to receive characterizing data that associated with the data structure having the timestamp that is nearest in value to said time, and use the characterizing data to render a visualization that is synchronized with the audio sample that is being rendered by the renderer" at col. 16, lines 22-39, col. 19, lines 1-11 and col. 17, lines 13-58. The data structure corresponds to the "graphic objects related by time" (col. 17, lines 18).

Although the function of the Milne's processor is just as same as the function of the present invention's pre-processor which is provides the frequency data (Specification, page 19, lines 4-5), Milne does not use explicitly the term "pre-processor". However, Jang teaches the audio pre-processor 117 in Figure 6. Both Milne and Jang are direct to the same field as the synchronization between the audio and video data based on the audio sample rate, it thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Milne with the teaching of Jang to include "a pre-processor", in order to provide a multimedia system having a time base correction function between the incoming audio sample

rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

Therefore, the claimed invention as represented in the claims does not represent a patentable over the art of record.

Per (d), with regards to claim 23, Milne teaches the step of "receiving multiple audio samples" at col. 15, line 61 to col. 16, line 20. It is noted that, the "82,100th sample in the audio sequence" corresponds to the multiple audio samples.

Milne's reference teaches the step of "determining when an audio sample is being rendered by the media player renderer" at col. 16 lines 21-39, that is, "the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock".

Milne teaches the step of "responsive to said determining, using the characterizing data that is associated with the audio sample that is being rendered to provide a visualization" at col. 16, lines 21-39, col. 19, lines 1-11, col. 17, lines 13-58. It should be noted that the characterizing data corresponds to the current time (col. 16, line 32) which is examined to determine if it needs to speed up or slow down the play back rate or jump to a new position in the audio sequence in order to insure that the correct sample are being played from the speaker (col. 16, lines 33-36), and the data structure corresponds to the "graphic objects related by time" (col. 17, lines 18).

Milne teaches "pre-processing the audio samples before they are rendered by a media player renderer, the pre-processing providing characterizing data for each sample" at col. 16, lines 62-64, col. 15, lines 39-59, and Fig. 25. More specifically, as shown in Fig. 25, the audio

sample is provided characterizing data (i.e. clock rate) associated with each sample before the samples are rendered. It should be noted that the DAC and amplifier render the audio sample after the host processor (Fig. 25).

It should be understood that the function of the Milne's processor is closely as same as the function of the Applicant's pre-processor which provides the frequency data. Milne, however, does not use explicitly the term "pre-processor". Jang teaches the audio pre-processor 117 in Figure 6. Both Milne and Jang are direct to the same field as the synchronization between the audio and video data based on the audio sample rate, it thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Milne with the teaching of Jang to include "a pre-processor" in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

Arguments as raised are moot since all claim limitations relevant to this issue have been addressed accordingly

Per (e), with regards to claim 31, Milne teaches "calling the media player renderer for a time associated with a currently-rendered audio sample" at col. 16, lines 21-39. It is noted that the clock object current time corresponds to "time", which associated with the $88{,}200^{th}$ sample in the audio sequence (see col. 16, lines 26-27), and the audio player corresponds to the media player.

Milne's reference teaches "using the time to select a data structure containing characterizing data associated with the current-rendered audio sample" at col. 17, lines 13-58 and

Fig. 37. Note that the data structure corresponds to the "graphic objects related by time" (col. 17, line 18).

Milne teaches "providing the characterizing data to a component for rendering visualization" at col. 19, lines 1-9, Fig. 37. It is noted that Figure 37 shows the audio clock object 3720 being synchronized with the visual clock object 3710.

Milne teaches "calling an audio sample pre-processor for characterizing data that is associated with an audio sample that is currently being rendered by a media player rendered" at col. 16, lines 21-39, that is, "The audio player can synchronize to an external clock. In this case, the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock". It should be understood that the rendering object corresponds to an audio rendering object.

The function of the Milne's processor is to provide the frequency data, which is as same as the function of the present inventions pre-processor (Specification, page 19, lines 4-5), but Milne does not explicitly disclose the term "pre-processor". However, Jang teaches the audio pre-processor 117 in Figure 6. Both Milne and Jang references are directed to the same field as the audio-to-video synchronization, the combination to employ the pre-processor providing frequency data associated with each sample as taught by Jang in the Milne's system, in order to correct the time-base the incoming audio sample rate based on the master clock as taught by Jang at col. 13 (32-42).

Per (f), with regards to claim 21, Van Zoest teaches "a timestamp module for assigning timestamps to audio samples that are to be rendered by a media player renderer" at col. 4, lines

56-65, that is, "a time stamp, and session data". It is noted that the session data of Van Zoest could be audio file, video file, audio-video file (col. 5, lines 10).

Van Zoest teaches "a spectrum analyzer for processing the audio samples to provide frequency data associated with the audio sample" at col. 16, lines 9-15, that is, "the verification process runs a Fast Fourier Transform ("FFT") algorithm in each WAV samples to generate their respective power spectrums".

Van Zoest teaches "multiple data structures each of which being associated with an audio sample, the data structures each containing timestamp data and frequency data for associated audio sample" at col. 5, lines 8-19, that is, "The stored information may include the titles of works, names of the artist, information about the band or performance, UPC data, or any information about the works".

Van Zoest teaches "the system being configured to use the timestamp data to ascertain a data structure associated with an audio sample that is currently being rendered by the media player renderer and provide the frequency data associated with that audio sample so that the frequency data can be used to render a visualization associated with that audio sample" at col. 8, lines 26-42. Note that the "any information" corresponds to the timestamp associated with the content database (i.e. audio file).

Therefore, the Van Zoest system cannot be distinguished from the claim invention since Van Zoest teaches all such elements as discussed.

Per (g), with regards to claim 29, Milne teaches "receiving multiple audio samples" at col. 15, line 61 to col. 16, line 20. It is noted that "the 44,100 samples" corresponds to the multiple audio samples.

Milne teaches "maintaining frequency data and a timestamp for each sample in a data structure" at col. 16, lines 21-59. It should be noted that the timestamp corresponds to the external clock's object current time, and the frequency data corresponds to the clock rate (col.16, line 48).

Milne teaches "determining when an audio sample is being rendered by the media player renderer" at col. 16, lines 21-39, that is, "the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock".

Milne teaches "ascertaining a time associated with a currently-rendered sample at col. 16, lines 21-39 as "the audio player must insure that the sample being reproduced by the speaker corresponds to the current time of the external clock".

Milne teaches "selecting a data structure having a timestamp that is nearest the time" at col. 17, lines 13-58. Note that the data structure corresponds to the "graphic objects related by time" (col. 17, line 18).

Milne teaches "providing frequency data associated with the selected data structure to a component configured to use the frequency data to render the visualization" at col. 17, lines 15-27, col.19, lines 1-11, col. 16, lines 40-59, Fig. 37. The frequency data corresponds to the clock rate at col. 16, line 48. The using of this for visualization is shown in Figure 37. The selecting data structure corresponds to "A graphic sequence also provides a member function that maps a time within the duration of the sequence to a particular graphic object" (col. 17, lines 23-25).

Milne does not specifically teach a pre-processor and a Fast Fourier Transform.

Although the function of the Milne's processor is as same as the function of the present invention's pre-processor which provides the frequency data (Specification, page 19, lines 4-5), Milne does not specifically use the term "pre-processor" for his component. However, Jang teaches the audio pre-processor 117 in Figure 6. Both Milne and Jang direct to the same field as the synchronization between the audio and video data based on the audio sample rate, it thus would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Milne with the teaching of Jang to have "a pre-processor" in order to provide a multimedia system having a time base correction function between the incoming audio sample rate and that which is derived from the system master clock, as taught by Jang at col. 13, lines 38-41.

And Zoest teaches the Fast Fourier Transform at col. 16, lines 9-15, that is, "the verification process runs a Fast Fourier Transform ("FFT") algorithm in each WAV samples to generate their respective power spectrum".

Milne, Zang, Zoest are directed to the same field as accessing the mulitmeadia objects in the network, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ the audio pre-processor of Zang, which comprises a Fast Fourier Transform in order to provide a multimedia system having a frequency analysis of data as taught by Zoest at col. 16 line 17. By doing this, the system could verify and identifying the corresponding portions of the samples with maximum correlation, as taught by Van Zoest at col. 16, lines 4-6.

Per (h), with regards to claim 34, Milne teaches "query for frequency data that is associated with an audio sample that is currently being rendered by the media player renderer" at col. 16, lines 40-59. The frequency data corresponds to the clock rate at (col. 16, line 58).

Milne's reference teaches the step of "query for a time associated with the currently-rendered audio sample" at col. 16, lines 21-39. It should be noted that the associated time corresponds to the external clock object's current time, and the currently rendered audio sample corresponds to the 88, 200^{th} samples in the audio sequence.

Milne's reference teaches the use of time to select a data structure containing frequency data associated with the currently-rendered audio sample at col. 17, lines 13-27. It should be noted that the selecting step corresponds to the function mapping a time within the duration of the sequence to a particular graphic objects.

Milne teaches " providing the frequency data to a component that uses the frequency data for rendering a visualization" at col. 17, lines 15-27, col. 19, lines 1-11, and col. 16, lines 40-59, Figure 37. It should be noted that the frequency data corresponds to the clock rate at col. 16, line 48, and a visualization is shown in Figure 37, and the selecting data structure corresponds to "A graphic sequence also provides a member function that maps a time within the duration of the sequence to a particular graphic objects" (col. 17, lines 23-25).

Milne teaches the pre-processing audio sample, which is performed by a host processor as shown in Fig. 25. But Milne does not specifically disclose the term "pre-processor".

Milne also does not teach the using of a Fast Fourier Transform.

However, Jang teaches the audio pre-processor 117 in Fig. 6, col. 13, lines 14-42. And Zoest teaches the Fast Fourier Transform at col. 16, lines 9-15, that is, "the verification process

runs a Fast Fourier Transform ("FFT") algorithm in each WAV samples to generate their respective power spectrum".

Milne, Jang, Van Zoest are directed to the same field as accessing the multimedia objects in the network, the incorporation of Jang, Van Zoest in the combined system would have enhanced the performance of the system. By doing this, the system could verify and identifying the corresponding portions of the samples with maximum correlation, as taught by Van Zoest at col. 16, lines 4-6.

Therefore, the claimed invention as represented in the claims does not represent a patentable over the art of record.

Per (i), with regards to claim 35, Prasad teaches "defining a frame rate at which visualization frames of a visualization are to be rendered" as "the pre-determined frame rate maybe; for example, 15 frames-per-seconds" (col. 6, line 19-21).

Prasad teaches "setting a threshold associated with an amount of time that is to be spent rendering a visualization frame" as "The synchronization information S may include any information that indicates how much of the audio data stream" (col. 6, lines 44-45).

Prasad teaches the step of "monitoring the time associated with rendering individual visualization frames" at col. 6, lines 28-53. The monitoring corresponds to the step determining the total elapsed time in col. 6, line 51.

Prasad teaches "determining whether a visualization frame rendering time exceeds the threshold" at col. 6, lines 28-53, that is, "the synchronization information S may be an indication of the number of samples played, this indication can be used by the video playback process 37 to

determine the total elapsed time for which the audio stream 48 has been playing. Alternatively, the information S may specify the elapsed time explicitly"(col. 6, lines 48-53).

Prasad teaches "providing an effective frame that is longer than the defined frame rate if the determined visualization frame rendering time exceeds the threshold" at col. 6, lines 28-59. The providing an effective frame corresponds to the step of adjusting the rate of playback of the recorded video stream 41 (col. 6, line 42).

Prasad does not teach the characterizing data associated with the audio samples. However, Milne teaches "the visualization frames being rendered from characterizing data that is computed from audio samples and which is used to create the visualization" at col. 17, lines 15-39 and Fig. 37. It should be noted that the data structure corresponds to the "graphic objects related by time" (col. 17, lines 18). Moreover, as shown in Fig.37 Milne shows the audio clock object 3720 being associated with the visual clock object 3710 (col.19, lines 8-11).

Prasad and Milne are directed to the same field as the method and apparatus for synchronization audio and video stream. It thus would have been obvious to one of ordinary skill in the art at the time of the invention to employ the characterizing data computed from audio sample as taught by Milne to the system of Prasad in order to display the visual clock object being synchronized with the audio clock object as taught by Milne at col.19, lines 8-11.

Arguments as raised are moot since all claim limitations relevant to this issue have been addressed accordingly.

Per (j), with regards to claims 38, Prasad teaches "set a threshold associated with an amount of time that is to be spent rendering a visualization frame for a given frame rate" at col. 6, lines 19-21, that is, "The pre-determined frame rate may be, for example, 15 rates-per-second".

Prasad teaches "monitoring the time associated with rendering individual visualization frames" at col. 6, lines 28-53. The monitoring corresponds to the step determining the total elapsed time (col. 6, line 51).

Prasad teaches "determining whether a visualization frame rendering time exceeds the threshold" at col. 6, lines 28-53, that is, "the synchronization information S may be an indication of the number of samples played, this indication can be used by the video playback process 37 to determine the total elapsed time for which the audio stream 48 has been playing. Alternatively, the information S may specify the elapsed time explicitly" (col. 6, lines 48-53).

Prasad teaches "providing an effective frame that is longer than the defined frame rate if the determined visualization frame rendering time exceeds the threshold" at col. 6 lines 28-59. The providing an effective frame corresponds to the step of adjusting the rate of playback of the recorded video stream 41 (col. 6, line 42).

Prasad does not teach the characterizing data associated with the audio samples. However, Milne teaches "the visualization frames being rendered from characterizing data that is computed from audio samples and which is used to create the visualization" at col. 19, lines 1-9, col. 17, lines 15-39, Fig. 37. Note that as shown in Fig.37, Milne discloses the audio clock object 3720 being associated with the visual clock object 3710 (col. 19, lines 8-11).

Prasad and Milne are directed to the same field as the method and apparatus for synchronization audio and video stream. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the characterizing data computed from audio sample as taught by Milne to the system of Prasad in order to display the visual clock object being synchronized with the audio clock object as taught by Milne at col. 19, lines 8-11.

Accordingly, the claimed invention as represented in the claims does not represent a patentable over the art of record.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

ml

Miranda Le
February 12, 2004

GRETA ROBINSON
PRIMARY EXAMINER